



Fecal Incontinence: A Devastating Pathology

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ABSTRACT

Introduction: Fecal incontinence is the lack of control or involuntary loss of fecal matter; its etiology is multiple and confusing. **Objective:** 18 years of experience in the Colon and Rectal Surgery service in the treatment of patients suffering from fecal incontinence. **Method:** longitudinal, retrospective, observational and descriptive study. Records of patients surgically treated for fecal incontinence clinically with anatomical deletion in the Colon and Rectal Surgery services of three hospitals are reviewed. **Results:** Of 341 patients with fecal incontinence, of which 225 were treated with rehabilitation and non-surgical medical therapy, the rest of the group, which were 116 patients with fecal incontinence, were managed surgically. Anal plasty with sphincter restitution was performed in 113 patients, representing 97.41%, and in 3 cases the Parks posterior repair surgical technique was performed in 2.58%. **Discussion:** Fecal incontinence has been clinically classified by severity in various ways. Likewise, conservative and surgical management is varied, transitory and achieves a great improvement in symptoms, biomaterial injectables and surgical treatment that manages to cure the disease. **Conclusions:** Specialized surgery is currently the most cost-effective, most efficient and effective solution to treat fecal incontinence, which is devastating, since it exposes overwhelming success rates and provides a quality of life very close to normal to the patient.

Keywords: Fecal incontinence, Anal plasty, Sphincter reconstruction, Anus, Quality of life.

INTRODUCTION

Fecal incontinence is a disease that integrates a symptom that becomes a sign and involves a process so complex and coordinated that the patient loses (continence and/or defecation). It is defined as the lack of control or involuntary loss of fecal matter. [1] Fecal incontinence has been documented in an overall incidence in patients with inflammatory bowel disease as high as 37%, and incidences of incontinence in patients with chronic nonspecific ulcerative colitis and in patients with Crohn's disease were comparable. [2, 3] Spinal cord injuries are another etiology that needs to be documented, and more than 296,000 Americans and 86,000 Canadians

present with this type of pathology, with neurogenic bowel dysfunction with constipation or fecal incontinence, which is reported in 56.9%. [4] Spontaneous spinal epidural hematoma of uncertain origin causes fecal incontinence and if left untreated, this symptom will be permanent. [5] Patients underwent ultra-low anterior resection for rectal cancer and are reported as another cause to have some type of long-term fecal incontinence, which was assessed using the Wexner incontinence score, with mild to moderate results, with some subsequent improvement. [6] Another source of fecal incontinence is pelvic floor dysfunction, secondary to mechanical trauma, neuronal impairment, or increasing age. [7]

The prevalence of female pelvic floor dysfunction who experienced a vaginal birth and are in their reproductive years or in studies of postmenopausal patients is highly variable, with figures ranging from 1.9 to 67%, however, the authors do not consider it an uncommon reason. [8] Anal incontinence from obstetric injury or trauma affects 6% of primiparous births, approximately 10,000 United Kingdom women per year. The incidence tripled in primiparous women in recent years and increases proportionally to the degree of injury to the sphincters of the anus. [9, 10] The incidence of gynecologic fistulas in developed countries is 0.06%. Although fistulas due to trauma during childbirth are less common in these countries, they can also appear as a sequel to surgery, inflammatory bowel disease, radiation and/or malignancies and thus evoke fecal incontinence. [11] Women who suffer from obstetric fistula suffer from constant fecal incontinence, shame, social segregation, and health problems. It is estimated that more than 2 million young women are living with untreated obstetric fistula in Asia and sub-Saharan Africa. [12] Continence problems, which manifest as different subtypes of fecal incontinence, are distressing but common conditions, and they increase in prevalence with aging, being more prevalent among people with multiple comorbidities, including obesity, depression, impaired mobility, and dementia. [13]

On the other hand, defecation disorders in patients with congenital anorectal malformations represent another etiology, evaluating the rectoanal inhibitory reflex in fecal incontinence, the reflex seems to be present in patients regardless of the type of malformation. However, corrective surgery can alter this reflex. Apparently, its absence produces constipation with increased rectal volume and fecal incontinence. [14] Fecal incontinence is a common problem that can have a negative impact on a patient's quality of life. Current international guidelines lack robust treatment recommendations because there are few studies in the field, four core areas of study on average have been reported per protocol, and they were:

1. Severity of fecal incontinence in 83%.
2. Quality of life of the patient in 64%.
3. Number of episodes of fecal incontinence 40%.
4. Anorectal motor function was expressed in 39%.
5. Frequency of bowel movements in 16%. [15]

OBJECTIVE

To present the experience of 18 years in the Colon and Rectal Surgery service in the treatment of patients suffering from fecal incontinence, in a study of three hospitals in Mexico City.

MATERIAL AND METHODS

The study had a longitudinal, retrospective, observational and descriptive design. Where the records of all patients surgically treated for clinically expressed fecal incontinence of the

component of an anatomical deletion are reviewed, in the Colon and Rectal Surgery services of three hospitals that are of third level health care, in Mexico City:

- Hospital High Specialty Medical Unit La Raza National Medical Center. "Dr. Gaudencio González Garza" General Hospital of the Mexican Institute of Social Security. Mexico City. Country: Mexico.
- "Dr. Belisario Domínguez" Specialty Hospital of Mexico City of the Ministry of Health.
- Metropolitan Hospital of Mexico City. Grupo Ángeles. Mexico City. Country: Mexico.

In a study period that spanned from May 2005 to May 2023. The records of patients who presented fecal incontinence were evaluated: age, sex, cause or etiology of fecal incontinence, clinical picture, as well as the degrees of incontinence by their classification and/or Jorge-Wexner score according to their degrees and added factors See Table 1. [16, 17]

Table 1: Wexner scale

Variable	Never	<1 once a month	>1 time a month <1 time a week	>1 time a week < 1 time a day	>1 time a day
Solid stool incontinence	0	1	2	3	4
Liquid stool incontinence	0	1	2	3	4
Incontinence to gas	0	1	2	3	4
Diaper use	0	1	2	3	4
Disruption of social life	0	1	2	3	4

The length of care for surgical treatment, types of treatments with or without emergency or elective surgery, surgical time, surgical bleeding, days of hospital stay, complications, and/or recurrence. With a follow-up of patients at one week, one month, three months, six months and one year; it culminates with the morbidity and mortality report. The analysis of the results was carried out using descriptive statistical procedures. In addition, an analysis of the research of the national and international medical literature on what is described in relation to fecal incontinence is carried out.

RESULTS

A total of 341 patients with fecal incontinence were identified, of which 225 were treated with rehabilitation and non-surgical medical therapy, the rest of the study group, which consisted of 116 patients who presented fecal incontinence, were surgically managed in the study period indicated; only cases with anatomical sphincteric deletion were included, performing a sphincter reconstruction as warranted. There were 41 men (35%) and 75 women (65%), with an age range of 17 to 54 years, with a mean age of 29 years and a bimodal range of 23 and 45 years. They were classified according to the cause or etiology of fecal incontinence due to anatomical injury. See table 2.

Table 2: Number and percentage of patients according to etiology of sphincteric anatomical lesion.

Aetiology	No. /%
	116/100
• Acute obstetric trauma	12 /10.34
• Chronic obstetric trauma	23 /19.82
• Post-surgical	38 /32.75

• Accident	19 /16.37
• Aggression	21/18.10
• Other	03/ 02.58

The first cause of fecal incontinence in this study is surgical trauma in 32.75% due to another surgery, in second place is obstetric trauma and in third place aggression with 18.1%. The clinical picture is evaluated in this study through an exquisite assessment with a detailed medical history, signs and symptoms, physical examination and with the Jorge-Wexner scale, routinely. If possible, (due to the lack of resources and infrastructure) attempts were made without success to complete the complete protocol with endoanal ultrasound, defecography, electromyography or pudendal latency and anal/colonic manometry, sometimes with the patients' own resources. The study group was categorized into three grades of fecal incontinence by score before and after surgery. See table 3.

Table 3: Evaluation with the Wexner scale preoperative and postoperative in number/percentage. of patients with fecal incontinence with anatomical lesion

Incontinence Fecal	PRE QX NO. / % /W	POS QX NO. / % / W
Lightweight	11/09.48/4-6	4/3.44/2
Moderate	79/68/10-14	1/0.86/7-9
Severe	26/22.41/17-20	0/0/0

QUOTATIONS:
PRE QX: PREQUIRURGICAL
POS QX: POSQUIRURGICO
NO.: NUMBER OF CASES
?: PERCENTAGE
W: WEXNER SCALE

In most patients, moderate fecal incontinence in the preoperative period was up to 68% (in most of the study group with incontinence to gas, fluids and defecatory urgency), secondarily severe fecal incontinence in 22.41% (incontinence to gas, liquids and solids with the use of a diaper and a total quality of life disorder). and the rest of the group is reduced to 09.48% (fecal incontinence is only due to gas and with some intermittency of defecatory urgency).

In the postoperative period, it was evaluated at 4 weeks, managing to report a resounding and resounding success, much higher than 96%, with a complete cure of the signs/symptoms and with minimal sequelae; only in five cases, representing 4.31%, therapy with rehabilitation and some together biofeedback were added. At 6 months after surgery, the success rate was 99.13% and only one patient had mild fecal incontinence of 2 points on the Jorge-Wexner scale at one year of follow-up, previously 9.

The time of care from the sphincteric condition or injury of the patients in an acute way, was intentionally postponed until 6 months, for a scheduled surgical management and on the contrary, patients with a chronic sphincteric injury attended specialized medical care at 3 years on average; with failed surgical repair attempts on two occasions (29%) and once (34%), with

a predominance in individuals due to obstetric causes 76% or post-surgical due to another disease 24%.

Two surgical techniques are performed for sphincter reconstruction; It is evident that you must have a shale knowledge of the anatomical region and the experience that leads to gratifying results, both for the patient and for the surgeon.

It should be considered that they have been modified in a continuous or permanent improvement, through expertise and years, by one of the authors of this manuscript, the surgeon Morelos Adolfo García Sánchez and his work team:

Surgical Technique of Anal Sphincter Replacement Surgery

Prior to the study protocol of the patient's anal incontinence disease, rectal preparation is performed (3 to 2 evacuating enemas at 12, 8 and 2 hours prior to surgery, with a minimum fast of 8 hours and liquid diet 48 hours before), prophylactic antibiotic therapy with metronidazole and cefuroxime is always used or for allergy the alternative is ciprofloxacin. In the operating room in the Kraske position or Sevillian knife with exposure of the fixed area, antisepsis is performed with isodine solution and under conventional asepsis; A digital rectal examination is carried out with the intention of dilating and detecting a tumor or foreign object, as well as initiating the detection of the ends or edges of the sphincteric muscles and the area devoid of them. Anoscope is performed with Pratt's bivalve speculum, exploring all four quadrants.

The edge of the margin of the anus where the sphincteric absence or lesion is located is transversely incised, with an incision of 3 cm, a proximal cutting dissection is carried out gently and with perfect hemostasis with electrocautery, the edges or ends of the external sphincter are identified sectioned into the three portions or those that remain (subcutaneous portion as the outermost, the superficial portion that is more corpulent and the deep portion). The edges are dissected by skeletonizing the edges with an extension in length of 2 to 2.5 cm, avoiding vascularization, the muscular edges are referred with Allis forceps in a single tooth, and an immediate reconstruction of all the sphincters is performed, with a different or new technique, very similar to the anal sphincteroplasty of the Slade type. (there is no overlap of the sphincters, they are only faced, the type of suture was changed, and no derivative colostomy is performed, in some cases only medical colostomy) [18, 19, 20] with U-stitches with polyglycolic acid of 00 if it is little woven and thicker than 0, 3 to 4 stitches with 6 to 8 knots each, hemostasis is verified. And closure is performed with simple points separated from mucosa-muscle-mucosa, as well as skin closure, with continuous emergence with 000 polyglycolic acid. Haemostasis is checked and gauze patch is placed externally.

Parks' Posterior Repair Surgical Technique [21]

The surgical technique of anal sphincter replacement surgery was performed in 113 patients, representing 97.41%, one patient was left with mild incontinence with 2 Jorge-Wexner points. And only in 3 cases did the Parks posterior repair surgical technique be 2.58% and one of them presented moderate incontinence with 7 Wexner points.

In all surgical interventions, they were performed scheduled in advance, modifying exceptional conditions of nutrition, non-infection, non-anemia, Karnofsky greater than 70%, rectal

preparation prior to surgery, prophylactic antibiotic therapy and in a period of time to achieve optimal local conditions with sitz baths, so that at the local level it is possible to prevent the tissues from being infected and that there is no inflammatory process. or acute/chronic dermatitis or another condition that alters the healing of the surgical event locally or systemically.

An average surgical time of 96 minutes is documented, with ranges of 60 to 221 minutes, in addition, the hemorrhage that occurs with an average of 100 milliliters with an amplitude of 50 to 250 milliliters. The days of hospital stay are reported with a measurement range of 3 days and in 5 cases there was a medical colostomy for 9 or up to 15 days, in 3 of them they were with the Parks posterior repair surgical technique. There were no complications, nor was recurrence reported. In the follow-up in the outpatient clinic, the level of continence was evaluated at one month, three months, six months, and one year; the adjuvant with rehabilitation exercises of the pelvic floor and sphincteric muscles began 3 months after achieving complete closure/healing; only in 33 patients, or 28.4%, biofeedback therapy was added in 5 individuals, or 04.31%, where results were achieved with certain improvement.

Concluding a cure percentage of 94.73% of this group of patients (38 cases in total after surgical repair). No morbidity is documented and mortality is zero. A cure of surgical therapy was concluded definitively in 98.27%, only two patients out of 116 were left with sequelae, one with mild incontinence with 2 points and the other with variable incontinence ranging from 7-9 Jorge-Wexner points, which improved from severe fecal incontinence with diaper use to moderate incontinence without it. Thus, increasing their quality of life. The satisfaction for most patients was overwhelming, since prior to surgery their daily life with fecal incontinence was devastating.

DISCUSSION

The association between exercise and eating habits with defecation dysfunction in patients living with colorectal cancer, especially in those who have already undergone sphincter-sparing surgery and who have a certain degree of fecal incontinence, are dominant factors in this entity, so that the modification of the diet to alleviate defecatory dysfunction, it is a principle. [22]

It is necessary to explain what the process or act of defecating is in a normal way, since it involves several events or facts that are subsequent or coordinated together: [23]

1. The rectum detects fecal matter or mass effect.
2. Progressive distention of the rectum
3. Relaxation of the inhibitory anal reflex after rectal capacitance exceeded
4. When you want to defecate, you voluntarily straighten the anorectal angle.
5. Increased intra-abdominal pressure due to the effort of pushing.
6. When the pressure increases, there is a descent of the pelvic floor coordinating.
 - Rectal contraction
 - Inhibit contraction of the external anal sphincter

It should be clarified that patients in whom there is no sphincteric anatomical lesion, but only the rectal capacitance is affected, due to the chronic inflammatory scarring due to continuous fibrosis of repair of the multiple ulcers (colon and tubular rectum) as occurs in the inflammatory bowel disease of chronic non-specific ulcerative colitis (does not occur in Crohn's

disease) [24] or tubular ischemia due to chronic burn due to radiant energy, which is the case of proctitis after radiotherapy. [25, 26]

On the other hand, in cases that undergo rectal or colon surgery, such as complete rectal prolapse, ileal reservoirs, proctectomies, subtotal colectomies for various reasons. It must be clear that it is not a fecal incontinence and that condemning the patient in a situation should not be confused with a misdiagnosis of fecal incontinence and therefore an erroneous treatment, since it is only a disorder of the fecal act and not pure fecal incontinence as such. [27, 28]

By etiology, fecal incontinence can be divided, associated or organized as follows. See Table 4.

Etiology of Fecal Incontinence
❖ Psychiatric or developmental illnesses: • Irritable bowel syndrome • Post-cholecystectomy diarrhea • Constipation and fecal impaction • Inflammatory causes: Actinic proctitis, inflammatory bowel disease with rectal compromise. ❖ Pathology of the central nervous system: • Dementias, stroke, tumors, multiple sclerosis, injury of spinal cord. ❖ Disorders that affect rectal ability and/or sensation: • Inflammatory diseases: actinic proctitis, Crohn's disease, colitis Colitis. • Anorectal surgery • Rectal hyposensitivity and hypersensitivity. ❖ Anal sphincter weakness: • Traumatic: obstetric, surgical (e.g. hemorrhoidectomy, internal sphincterotomy, fistulectomy) • Non-traumatic: scleroderma, idiopathic degeneration of the sphincter. • Neuropathy: peripheral (e.g. pudendal nerve involvement) or generalized (e.g., diabetes mellitus). ❖ Pelvic floor disorders: • Rectal prolapse, descending perineum syndrome.

Adapted from Rao S.S., Bharucha A.E., Chiarioni G., et al. [29]

However, as mentioned above, defecation disorders should not be confused with fecal incontinence, as in the table above.

It has been classified in its clinical presentation or severity of presentation of fecal incontinence in various ways. In 1983, Browning et al. evaluated the degree of fecal incontinence in patients with reconstructive sphincter surgery in 42 cases, where they determined that the results should be clinically expressed in a measurable way: [30]

1. Normal continence.
2. Fecal incontinence only to gases.
3. Fecal incontinence to fluids.
4. Fecal incontinences to solids

In 1988, Miller et al. They described the response to surgical treatment in 26 patients by creating a scale based on the degree, frequency, content of fecal incontinence and its nature, assigning scores. [31] In 1993, Jorge and Wexner developed a classification of fecal

incontinence, which was the most widely used and validated. The minimum score is 0 which means perfect continence, having a maximum of 20 where the points translate to be totally incontinent and evaluating the quality of life of the patient. [17, 32, 33]

Degrees of incontinence by Jorge-Wexner score:

- Mild: from 0 to 8 points.
- Moderate: from 9 to 16 points.
- Serious: greater than 17 points.

Finally, the scale that includes four aspects: the psychometric quality related to the health of life parameters, lifestyle, coping/behavior, distributed in 29 items. Created in 2000 by Rockwood et al. Proposing the Fecal Incontinence Severity Index (FISI). [34, 35] Although there are more scales, it is necessary to take into account those described above and focus objectively on patient benefit.

A detailed medical history, a prospective stool diary, and a complete digital rectal examination should be made, [36] along with diagnostic tests such as anorectal manometry, balloon expulsion test, trans lumbosacral anorectal magnetic stimulation test to evaluate neuropathy, electromyography/pudendal nerve latency, defecography and anal ultrasound; all of the above can provide detailed information about the mechanisms and structure. [37, 38]

The location of the lesion in the neuromuscular circuit of the anorectal muscle complex to determine the specific structural damage of the anal sphincter muscles, is with anal ultrasound being projected as a cornerstone for its surgical reconstruction, its rehabilitation or biofeedback therapy, as well as estimating the prognosis. [39, 40] Anal ultrasound provides detailed information about the anatomy of the anorectal region, it has been used in the preoperative and postoperative of anorectal pathologies, in addition, it is not only useful for the evaluation of benign pathologies, but also for the loco-regional staging of anal and rectal tumors. [41] Currently, the study protocol is being carried out with the lumen functional imaging probe (FLIP), which is a test of compliance of the anal sphincter that is under evaluation in specialized centers by means of images of the tube lumen in fecal incontinence for diagnostic purposes. [42]

Regarding the treatment of fecal incontinence, each case must be individualized and the best alternative must be offered to improve their quality of life, to cure or fully correct the disease or simply to improve the conditions, and that will depend on individual and community sociodemographic factors that predict adherence to the bowel regime. [43] Sacral nerve stimulation in children with functional and organic defecation disorders has demonstrated sustained improvement in fecal incontinence regardless of the underlying etiology with improvement of 30%, to 64% and up to 77%, but children with functional disorders were more likely to respond than those with organic disorders. [44, 45] Although neuromodulation has become fashionable, or has become a standard surgical treatment for fecal incontinence. Previous studies have reported several adverse events, including a suboptimal therapeutic response, infection, pain, bruising, and the possible need for reapplication. (implantation of a quadrupole electrode in the foramen of S3 or sometimes S4 and connection to an external temporary stimulator wire, then patients had a two-week trial and they completed an

incontinence diary to determine if there was a $\geq 50\%$ improvement in fecal incontinence episodes). [46, 47]

On the other hand, pelvic floor rehabilitation devices are essential tools in the treatment of fecal incontinence. However, there is limited knowledge of the effectiveness and mechanisms of these devices, and there is a lack of standardized guidelines for selecting the right devices, there are 3 main types; The first type includes devices that improve pelvic floor function, the second type consists of devices that mechanically block the exit hole, and the third type includes devices that aid drainage of the exit hole. [7, 48] It should be noted that biofeedback therapy has been shown to be effective in improving postoperative rectal control, however, the results of research with this therapy alone have not met expectations. Recent research has highlighted that stimulation of the perineal pudendal nerves has a greater impact on improving pelvic floor muscle function than biofeedback alone. Offering a potential breakthrough in non-surgical interventions. [49] Another option is acupuncture which is a common practice in Singapore for numerous medical conditions, its role in fecal incontinence is relatively novel. However, in the local context, acupuncture is accessible, inexpensive, and potentially well-accepted as a treatment strategy and is clinically effective and improves the quality of life of people with faecal incontinence. [50]

In low anterior resection syndrome, which after restorative rectal resection, up to 80% of patients report bowel dysfunction with broad-spectrum symptoms including some type of fecal incontinence, defecatory urgency, frequent bowel movements, and/or bowel dysfunction. But the so-called fecal incontinence should not be confused with the physiological adaptation of the dysfunction in defecation and that can extend up to a year; This adaptive time may be shorter and will depend on the surgeon's orientation to the patient or the cognitive capacity of the affected person. [51] Colonic botulinum toxin injections have been used in patients with fecal incontinence or symptoms of defecatory dysfunction, achieving a demonstrable benefit in improving patients' quality of life in the first months after rectal resection, but it is still being studied. [52]

It has been documented that patients in the intensive care unit have some type of fecal incontinence and control of excreta is essential, as fecal management systems (several well-accepted systems made of silicone or a soft balloon based on polyurethane) allow to prevent infections and complications. In addition, they improve patient comfort and mitigate emotional distress during illness, preventing complications and reducing prolonged hospital stays and additional treatments. [53] Another relevant aspect is proctological surgery where the risk of sectioning the sphincters of the anal complex intentionally or unintentionally is always present in fecal incontinence, which is why innovative techniques such as subtotal fistulectomy with sliding anoderm flap are published, exposing excellent cure rates without postoperative deterioration of anal function. [54], another report of anorectal surgery for complex anal fistulas performing complete fistulectomy with sphincter reconstruction documents successful fistula healing and no alteration in fecal continence. [55]

So, it should not be forgotten that there are anal surgical techniques in hemorrhoidal pathology that have dramatically modified the avoidance of injuring the anal sphincteric complex, greatly reducing bleeding and with a very satisfactory postoperative period with less pain and a speedy recovery. [56, 57] It should not be forgotten what happens in giant rectovaginal fistulas or

cloacas, true stigmata of torment, where satisfactory results are exposed with sphincter reconstruction managing to drastically reduce fecal incontinence or even eliminate it, with innovative surgical techniques of the so-called "five times" surgery. [58]

The treatment of patients affected by fecal incontinence remains a challenge and ranges from conservative treatment to the most complex, advanced and innovative surgical techniques. Despite all efforts, patients often undergo various therapeutic measures to achieve reasonable functional improvements. There are several artificial intestinal sphincter devices that can improve functional control in certain patients, however, it should be noted that complications after these surgeries occur frequently and the need for implant replacement remains at a considerable high frequency. [59] It should be mentioned that fecal incontinence is common in women and affects various aspects of their daily life and health, where it is carried out in this group of 39 women and the effect of biofeedback was evaluated exclusively, where it is said that in 26 of them, or 76.5% patients, they had improvement in symptoms. [60] In addition, it is important not to mention first-line treatment for fecal incontinence, which includes conservative treatment techniques, such as dietary modifications, where a high-fat diet may cause incontinence by making the stool too hard or too liquid, which are independent risk factors that, when combined with high-fat intake, decrease gastrointestinal motility and adversely affect the function of neurons in the enteric nervous system, so the goal is to increase dietary fiber to more than 25 grams per day and decrease fat with water amount greater than 2.5 liters per day. [61]

Another option for the management of transient fecal incontinence due to loss of the internal anal sphincter is elective surgery for anal fissure, according to some authors, who describe mild incontinence and defecatory urgency, [62] which becomes temporary due to the adaptability of the rest of the sphincters or the anal sphincteric complex achieved with Kegel exercises, which allow perfect continence to be achieved a posteriori and cure of the surgical disease (anal fissure chronicle). [63, 64] Another study has been published with very good results with a reported success rate of 93%, Anatomical sphincteroplasty is a surgical proposal for the overall anatomical reconstruction of anal sphincter lesions, even in cases of very severe damage. The procedure is safe and produces excellent clinical and functional results. [65, 66]

In summary, the treatment alternatives for fecal incontinence are:

1. Conservative or non-surgical management
 2. Biomaterial injectables.
 3. Surgical management [67]
- Toilet Repair or Reconstruction
 - Sacred neuromodulation
 - Dynamic sphincter replacement
 - Non-dynamic sphincter
 - Fecal diversion-colostomy/ileostomy

CONCLUSIONS

The definitive, palliative or even only improvement management of patients suffering from fecal incontinence is complex, multifaceted, meticulous and rigorous, which if progress is not achieved in its therapy is frustrating and greatly reduces the quality of life of the patients.

A defecatory disorder should not be confused with anal incontinence, as the international medical literature currently does, since the management is totally different and the confusion will lead to medical/surgical malpractice and damage to the patient.

Specific resources with an installed capacity and a certain competence of the surgeon are required to surgically address the individual with fecal incontinence, although almost always in the first two factors it is lacking, the surgical action for the benefit of the patient does not stop.

Specialized surgery is today the most cost-effective, most efficient and effective solution to treat fecal incontinence, which is devastating; since overwhelming success rates are exposed and that it provides a quality of life very close to normality to the affected person.

Conflict of Interest

The authors declare that they have no conflict of interest.

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